VA. DEQ Office of Pollution Prevention 629 East Main Street Richmond, VA 23219

I would like to submit our Company's status report for the Virginia Environmental Excellence Program. Please let me know if you have any questions regarding our program or this report.

Since last year, Security Storage Company has received numerous Safety Awards at the State and National level. These include;

Best Safety Record- Va. Trucking Association
Safety improvement Award – Va. Trucking Association
Safety Director of the Year – Va. Trucking Association
Environmental Leadership Award (Honorable Mention) – VMI
Most Improved Safety Program – American Moving & Storage Association
Safety Initiative Award – American Moving & Storage Association
Best Safety Program – American Moving & Storage Association

These awards reflect the dedication and commitment of our Company and its employees. Additionally, we have created an Air Quality Policy and implemented procedures to reduce the risk of environmental hazards, including mold and mildew. This program includes regular monitoring of relative humidity throughout the warehouse. HVAC systems have been adjusted to reduce humidity levels in various locations. We have also received a proposal for initiating an annual Electrical Preventive Maintenance Inspection Program, which includes infrared and ultrasonic testing. Additionally, we have removed the fuel handle locking pins, to prevent spillage of fuel. Drivers are required to remain with the vehicles and can no longer lock the fuel handle while pumping fuel.

We have implemented the use of Desicants and other temperature and humidity monitoring devices throughout the warehouse and inside storage containers. Our objective for this program is to monitor the relative humidity levels within the warehouse and reduce the risk of health problems and property damage due to mold and mildew.

Our Company's Environmental Initiatives were praised in a national trade magazine, which DEQ has provided a link to that article on your website. In addition to our ongoing training program, we have organized a Safety Committee at the Dulles Facility. This Committee meets and discusses potential hazards and training issues. The Action Items, comments and status of pending resolutions are documented in the Safety Committee Binder.

Our current goals and objectives are to implement an annual Electrical Preventive Maintenance Inspection program, which will inspect the building for hot spots and inadequate power problems. We are also attempting to procure an state of the art Fuel Management System. This system using signaling devices on vehicles and automatically logs the fuel usage, odometer, type of fuel, and mechanical condition of the vehicle. No input from the driver is required. Additionally, this system can receive data on the mechanical condition of the vehicle as it drives by the fuel pumps. The data is uploaded to a computer system and generates reports for the Safety Director and Fleet Maintenance Manager. This type of Preventive Maintenance will detect engine problems before serious mechanical problems develop. It will reduce the impact to the environment, from diesel emissions, by detecting engine problems before the symptoms are detected by the driver of the vehicle.

I am including a copy of our Air Quality Policy and a humidity chart for this report.

## SECURITY STORAGE COMPANY

# **OBJECTIVE & TARGET MANAGEMENT PROGRAM**

OBJECTIVE AND TARGET	OVERALL RESP: Michael Kerns					
Environmental Management System- Continue to improve recycling and disposal of older wood skids, test and evaluation of desiccants and data loggers for moisture control.						
Video Surveillance System- Improve data archiving, picture quality and alarm reporting						
Fuel Management System- Solicit bids for a fuel management system for fuel tanks, automated usage reports.						
Electrical Maintenance- Solicit bids for an annual electrical preventive maintenance inspection program						
Fire Systems – Terminate old sprinkler inspection contractor. Hire new sprinkler inspection company.						
PRESIDENT (SING):	ENV. RESP.(SIGN):		DATE:			
MANAGEMENT PROGRAM						
PROGRAM ELEMENT/ITEM	RESPONSIBLE		DUE DATE		ACTUAL DATE	
Facility: New Sprinkler Company for inspections	Michael Kerns Dennis Greene		1/1/04		1/1/04	
<b>Training:</b> Forklift, DOT, EMS, HAZOP	Michael Kerns		7/1/02 9/6/02		3/20/02, 9/6/02	
Security Camera System: Improve archiving and Reports	Michael Kerns		2/1/04		3/1/04	
<b>Recycling:</b> Recycle all cardboard boxes, sell old wood skids to 3 <sup>rd</sup> parties.	Michael Kerns Dennis Greene		4/1/04		6/1/04	
Environmental: Daily Tank tightness tests Bid on fuel management system Field test desiccants and data loggers	Michael Kerns		1/1/04 4/1/04 6/30/04		1/1/04 7/27/04 8/30/04	
TRACKING AND CLOSE OUT	INTERME	DIATE REVIEWS REQUIRE	D YE	s 🗖	NO 🗖	
INTERMEDIATE REVIEW (DATE, SIGN)		INTERMEDIATE REVIEW (DATE, SIGN)				
CLOSE OUT BY MANAGEMENT REVIEW (DATE, SING):						

# 08-001 INDOOR AIR QUALITY MANAGEMENT

## **PURPOSE:**

8.1 The purpose of this policy is to inform employees of Security Storage Company about Indoor Air Quality (IAQ).

## **OBJECTIVES:**

- 8.2 The objectives of this policy and procedures include the following;
  - To prevent illness and adverse health symptoms associated with poor indoor air quality.
  - To prevent damage to property associated with mold as a result of poor indoor air quality.
  - To respond to indoor air quality complaints effectively and to make recommendations for improvements.
  - To respond to incidents requiring mold remediation or clean up procedures.
  - To maintain indoor air quality within acceptable levels according to Company guidelines and reduce the risk of contamination.

### **GENERAL:**

- 8.3 Security Storage Company recognizes the impact that indoor air quality has in the workplace. In an effort to provide our Company with the optimum level of indoor air quality, the Safety & Compliance Department has developed an indoor air program.
- 8.4 Symptoms arising from poor indoor air quality often mimic those symptoms commonly associated with a cold, flu, or allergies. These symptoms may include upper respiratory irritation, congestion, headaches, nausea, fatigue and itchy or watery eyes. Through the analysis of indoor air quality, employee interviews, building inspections, Company risk management is often able to determine the cause of indoor air quality problems.

### FACTORS ASSOCIATED WITH POOR INDOOR AIR QUALITY:

- 8.5 Factors associated with poor indoor air quality problems include;
  - Inadequate ventilation
  - Contamination from inside buildings
  - Contamination from outside the building
  - Contamination from incoming storage
  - Microbial contamination
  - Building material contamination

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# 08-001 INDOOR AIR QUALITY MANAGEMENT

### **INADEQUATE VENTILATION:**

1.6 Inadequate ventilation occurs when an insufficient amount of fresh outside air is supplied to the interior environment.

### **CONTAMINATION FROM INSIDE THE BUILDINGS:**

- 1.7 Contaminates commonly found inside buildings include;
  - Ozone from copiers and fax machines.
  - Pesticides.
  - Cleaning agents.
  - Tobacco smoke.
  - Sewer gas from dry traps.
  - Cosmetics.
  - Forklifts
  - Power tools

## **CONTAMINATES FROM OUTSIDE THE BUILDINGS:**

- 8.8 Contaminates commonly found outside of buildings include;
  - Exhaust from motor vehicles.
  - Fumes from construction or renovations.

## **MICROBIAL CONTAMINATION:**

8.9 Microbial contamination occurs in buildings that are susceptible to water leaks and other sources of moisture. Contaminates can also be introduced into buildings from stagnant water in HVAC air distribution systems and cooling towers. Loading storage pallets in inclement weather and storing damp property in pallets contributes to the grow of mold and microbial contamination. Receiving incoming storage pallets, which have pre-existing mold growth contributes to microbial contamination of the building. In general, prevention of microbiological contamination is accomplished by eliminating standing water and other sources of moisture.

### **BUILDING MATERIAL CONTAMINATION:**

8.10 Building components treated with a variety of chemicals and preservatives are common sources of indoor air quality problems. Glues, inks and adhesives from new carpeting, and formaldehyde from some types of particle boards may emit gases and become sources of contamination.

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# 08-001 INDOOR AIR QUALITY MANAGEMENT

## PROCEDURES:

### LEVEL 1 INSPECTIONS:

8.11 The first step in a typical Indoor Air Quality (IAQ) investigation is a Level 1 or preliminary assessment. Level 1 assessments include interviewing employees and performing a walk-through inspection of the building. The information obtained through this process will determine the magnitude of the problem.

During the walk-through, building ventilation systems are evaluated and potential sources of contamination are identified. If the immediate cause or source cannot be found, a level 2 assessment is required.

### **LEVEL 2 INSPECTIONS:**

8.12 During the Level 2 assessment, common indoor air quality parameters including temperature, humidity and carbon dioxide levels are measured.

The most commonly cited quantitative measurements of indoor air quality are provide by ASRAE, American Society of Heating and Air Conditioning Engineers, as presented in standard 62-1989.

#### Carbon Dioxide

Carbon Dioxide, a major product of human respiration, is used as an indicator to evaluate the performance of ventilation systems. Ordinary outside air in urban areas normally contain about 350 to 400 parts per million (ppm). ASRAE standard 62-1989 (Ventilation for Acceptable Indoor Air Quality) recommends that Carbon Dioxide levels be maintained below 1000 ppm.

#### Temperature

Temperature ranges of 73 degrees F to 79 degrees F during winter months, and 69 F to 75 F during the summer months are recommended for climate controlled areas. These guidelines are intended to achieve thermal conditions in a given environment that at least 80% of the persons who occupy that environment will find it acceptable or "comfortable".

## Relative Humidity

Relative humidity levels can affect the release of many indoor contaminates, their concentrations in the air, and the potential growth of microbial organism (mold). Humidity can also have a direct effect on worker comfort. In ASHRAE 55-1981, a "comfort chart" shows an acceptable range of humidity to be from 20% to 60%.

### Carbon Monoxide

Carbon Monoxide (CO) is a colorless, odorless, and toxic gas. Incomplete combustion of liquid fuels (gasoline, propane,

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and kerosene) solid fuels (wood, charcoal, and coal), or natural gas produces CO. Indoor levels of CO are generally similar to levels found in the air outside of the occupied building. The current regulatory permissible exposure limit (PEL) as set by the Occupational Safety & Health Administration OSHA is 50 ppm.

### LEVEL 3 INSPECTION

8.13 A level 3 assessment is performed when a definitive cause for the symptoms cannot be determined during the Level 2 assessment of the investigation.

A Level 3 assessment consists of extensive and more specific monitoring and sampling for chemical and/or microbial contaminants. The Safety & Compliance Department will contract Level 3 assessments to a licensed and qualified Professional Industrial Hygiene Consultant.

### **PREVENTION:**

8.14 Moisture control is the key to mold control. When water leaks or spills occur indoors- act promptly. An infiltration should be stopped and cleaned immediately. A prompt response (within 24-48 hours) and thorough drying, and/or removal of water-damaged materials will prevent or limit mold growth.

## Mold prevention includes;

- Repair plumbing leaks and leaks in the building structures as soon as possible.
- Look for condensation and wet spots. Fix source(s) of moisture incursion problem as soon as possible.
- Preventing moisture from condensing by increasing surface temperature or reducing the moisture level (humidity) in the air.
- To increase surface temperatures, insulate or increase air circulation. To reduce the
  moisture in the air, repair leaks, increase ventilation (if outside air is cold and dry), or
  dehumidify (if indoor air is warm and humid).
- Keeping HVAC drip pans clean, flowing properly and unobstructed.
- Performing regularly scheduled building/HVAC inspections and maintenance, including filter changes.
- Maintaining moisture-generating appliances, such as dryers, to the outside where possible.
- Venting kitchens and bathrooms to the outside according to local Codes.
- Cleaning and drying wet or damp spots as soon as possible, but no more than 48 hours after discovery.
- Providing adequate drainage around buildings and sloping the ground away from buildings.

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# 08-001 INDOOR AIR QUALITY MANAGEMENT

 Pinpointing areas where leaks have occurred, identifying the causes, and taking preventive action when necessary.

## REMEDIATION/CLEANUP METHODS:

8.15 The purpose of remediation is to correct the moisture problem and to remove the moldy contaminates to prevent human exposure and further damage to the building materials, furnishings or property stored within.

#### Wet Vacuum

Wet vacuums are cleaners designed to collect water. They can be used to remove water from floors or hard surfaces where water has accumulated. They should not be used to vacuum porous materials, drywall. The tanks, hoses and attachments of these devices should be cleaned and dried after use, since mold and mold spores may adhere to the equipment surfaces.

### Damp Wipe

Mold can generally be removed from nonporous surfaces by wiping or scrubbing with water and detergent. It is important to dry these surfaces quickly and thoroughly to discourage further mold growth.

#### **HEPA Vacuum**

HEPA (High-Efficiency Particulate Air) vacuums are recommended for final cleanup of remediation areas after the areas have been thoroughly dried and contaminated materials removed. HEPA vacuums also are recommended where dust may have settled on surfaces outside the remediation area. Care must be taken to assure the vacuum hoses are properly seated in the vacuum so that all the air passes through the filter.

### Disposal of Damaged Materials

Building materials and furnishings contaminated with mold that are not salvageable should be placed in impermeable bags or closed containers while in the remediation area. These materials can usually be disposed of as ordinary construction waste.

## Use of Biocides

The use of biocide, such as chlorine bleach, is not recommended as a routine practice during mold remediation. There may be instances where professional judgment may indicate its use. (for example, when compromised individuals are present).

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# 08-001 INDOOR AIR QUALITY MANAGEMENT

Biocides are toxic to animals and humans, as well as to mold. If these chemicals are used, remember to ventilate the area to avoid exposure to fumes.

### **CLEANUP PROCEDURES:**

Small Isolated Areas: (10sq. ft or less) e.g., ceiling tiles, small areas on walls.

- Remediation can be conducted by regular building staff as long as they are trained in clean –up methods, personal protection, and potential health hazards.
- Respiratory protection (disposable masks) is recommended. Gloves and eye
  protection should be worn.
- The work area should be unoccupied.
- Containment of the work area is not necessary. Dust suppression methods, such as misting (not surfaces prior to remediation) are recommended.
- Contaminated materials that cannot be cleaned should be removed from the building in a sealed plastic bag. These materials may be disposed as normal waste.
- The work area and areas used by remediation workers for egress should be cleaned with a damp cloth and a detergent solution.
- All areas should be left dry and visibly free from contamination and debris.

## Medium-Sized Isolated Areas: (10-30 sq. ft.) e.g., individual wallboard panels.

- Remediation can be conducted by regular building staff. Such persons should be trained in the proper clean-up methods, personal protection, and potential health hazards.
- Respiratory protection is recommended. Gloves and eye protection are to be worn.
- The work area should be unoccupied.
- Surfaces in the work area that could become contaminated should be covered with a secured plastic cover before remediation to contain dust/debris and prevent further contamination.
- Dust suppression methods, such as misting (not soaking) surfaces prior to remediation, are recommended.
- Contaminated material that cannot be cleaned should be removed from the building in a seal plastic bag/container.
- The work area and areas used by remediation workers for egress should be HEPA vacuumed and cleaned with a damp cloth or mop and a detergent solution.

### Large Isolated Area (30-40 sq. ft.) e.g., several wallboard panels.

 Industrial hygienists or other environmental health & safety professionals with experience performing environmental investigations and/or mold remediation

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# 08-001 INDOOR AIR QUALITY MANAGEMENT

 should be consulted prior to remediation activities to provide an overview of the project.

The following procedures may be implemented depending upon the severity of the contamination:

- It is recommended that personnel be trained in the handling of hazardous materials and equipped with respiratory protection. Gloves and eye protection are required.
- Surfaces in the work area and areas directly adjacent that could become contaminated should be covered with a plastic sheet before remediation to contain dust/debris and prevent further contamination.
- Seal ventilation ducts/grills in the work place and areas directly adjacent with plastic sheeting.
- The work area and areas directly adjacent should be unoccupied.
- Dust suppression methods, such as misting (not soaking) surfaces prior to remediation, are recommended.
- Contaminated materials that cannot be cleaned, should be removed from the building in a sealed plastic bag or contained. These may be disposed of as ordinary waste.
- The work area and surrounding areas should be HEPA vacuumed and cleaned with a damp cloth and detergent solution.

## Extensive Contamination (greater than 100 sq.ft.)

Industrial hygienists or other environmental health & safety professionals with experience performing environmental investigations and mold remediation should be consulted prior to remediation activities to provide an overview of the project.

The following procedures may be implemented depending upon the severity of the contamination:

- Personnel trained in handling of hazardous materials and equipped with:
  - o Full face piece respirators with HEPA cartridges
  - Disposable protective clothing covering entire body including both head and shoes: and
  - o Gloves
- Containment of the affected area:
  - Complete isolation of the work area from occupied spaces using plastic sheeting sealed with duct tape (including ventilation ducts/grill, fixtures, and other openings).
  - The use of an exhaust fan with HEPA filter to generate negative pressurization; and
  - o Airlocks and decontamination room.
- If contaminant practices effectively prevent mold from migrating from affected areas, it may not require the removal of people from the surrounding work areas.
- Contaminated materials that cannot be cleaned should be removed from the building in a sealed plastic bag or container. The outside of the bags should be

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# 08-001 INDOOR AIR QUALITY MANAGEMENT

- cleaned with a damp cloth and a detergent solution and vacuumed in the decontamination chamber prior to their transport to uncontaminated areas. These materials may be disposed of as ordinary waste.
- The contained area and decontamination room should be HEPA vacuumed and cleaned with a damp cloth and mopped with a detergent solution and be visibly clean prior to the removal of the isolation barriers.

## **CHECKLISTS/FORMS**

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# 08-002 INCLEMENT WEATHER LOADING & UNLOADING

### **PURPOSE:**

8.21 The purpose of this policy is to reduce or eliminate unnecessary claims due to loading, unloading and storage of property during inclement weather conditions.

## **OBJECTIVES:**

- 8.22 The objectives of this policy and procedures include the following;
  - To prevent subsequent claims due to handling and storing property during wet weather conditions.
  - To prevent damage to property associated with mold as a result of storing wet or moldy property.
  - To take preventive measures to minimize risk of claims from damage by mold or mildew.
  - Identify property loaded in wet conditions and take preventative measures to examine, dry and document preventive measures.

#### PROCEDURES:

#### **IDENTIFYING PROPERTY FOR INSPECTION:**

- 8.23.1 All employees will be training to properly mark and document property, which is loaded, unloaded, packed or placed in storage, when inclement weather conditions pose a risk of moisture damage to property.
- 8.23.2 Employees will be provide with rolls of stickers, which will be placed on the pallet, lift van and inventory. These decals will indicate "HOLD" and alert warehouse managers that the property was loaded wet, had existing moisture or was loaded during wet weather conditions.
- 8.23.3 Warehouse managers will review all incoming paperwork and identify any job, which has been marked with "HOLD" decals. The storage or property marked with "HOLD" decals will be pulled for inspection, prior to being entered into storage or delivered to a customer. The property will be inspected for moisture. Any property found to be wet or have moisture will be aired out and dried.
- 8.23.4 All warehouses and Quality Control personnel will have access to decals, which indicate "INSPECTED BY .." . These decals will be used by the person inspecting the property marked as "HOLD". If the property is not required to be dried out, or if the property has been adequately dried and re-packed, the "QC-Inspected by.." decal will be affixed to the paperwork . The "HOLD" decal will be then removed from all pallets, lift vans or containers. All jobs marked for inspection with a "HOLD" decal must be inspected within 72 hours. All jobs marked for inspection must have a "QC-Inspected by.. " decal attached

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# 08-002 INCLEMENT WEATHER LOADING & UNLOADING

to the paperwork to verify that the property was inspected and is free of moisture and no property is wet or damp.

8.23.5 Any property found to have damage due to mold or moisture will be cleaned using the aforementioned remediations procedures for air quality . All remediation or cleaning measures will be documented and attached to the job file.

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